Charge Port Housing Package Installation (Illuminated Instruction ID: 42721902)

Installation Instructions Part Number

42721902

Kit Contents

QTY.	Description
1	Bezel Assembly with Wire Harness Pigtail ending in terminals
1	Drill Template
1	Replacement Door Seal
6	Tie Straps
2	Solvent Wipes
1	Installation Instructions

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Special Tools Required

Vinyl Tape (19 mm)

Electrical connector terminal pick

Plastic Wedge Trim Tool

Drill, 2 mm, 5 mm and 8 mm drill bits

Preliminary Procedures

1. Read all instructions before performing procedure.
2. Inspect kit to verify all parts are included.
3. Remove the left front wheel and tire assembly. Refer to Tire and Wheel Removal and Installation in Vehicle Service Manual.

Procedure

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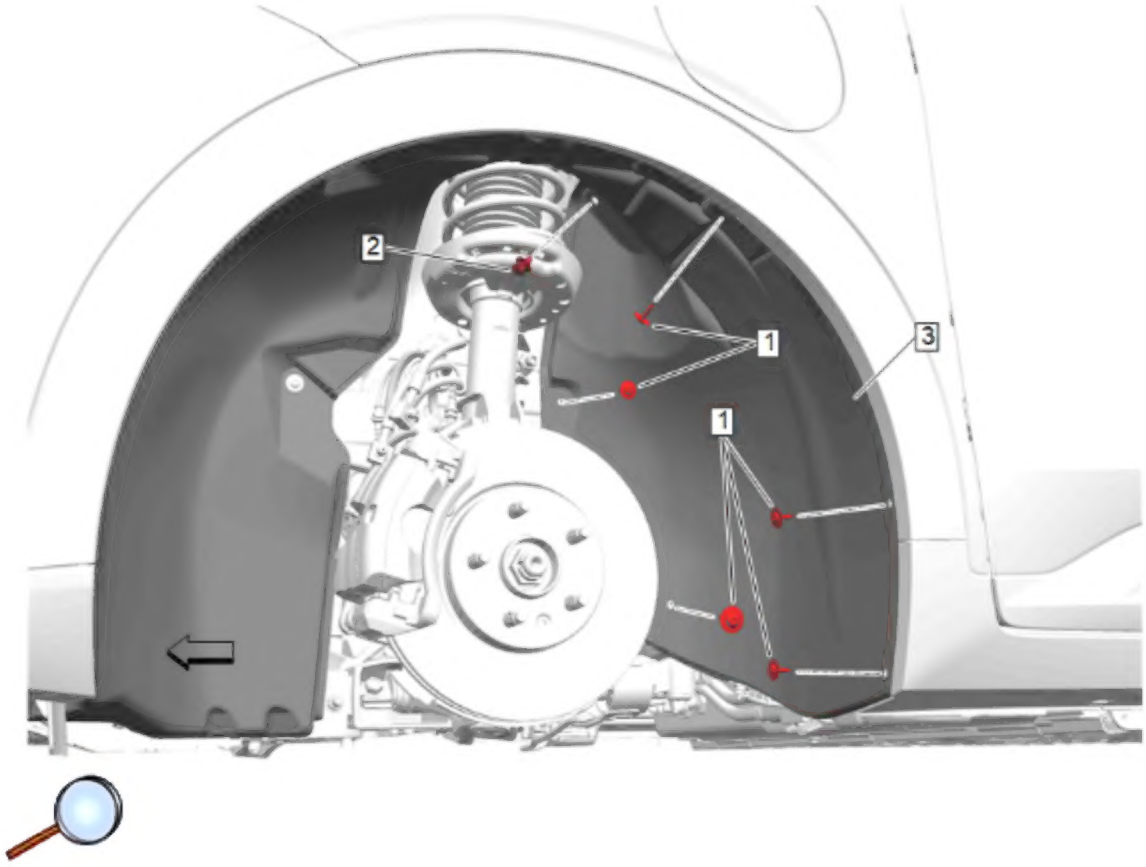

1. Remove the front wheelhouse screws (1) and retainer (2) holding the rear half of the left front wheelhouse liner (3).
2. Position the wheel house liner (3) enough to view and access the rear of the charge port.
3. Open the charge port door.
4. Open the hood.

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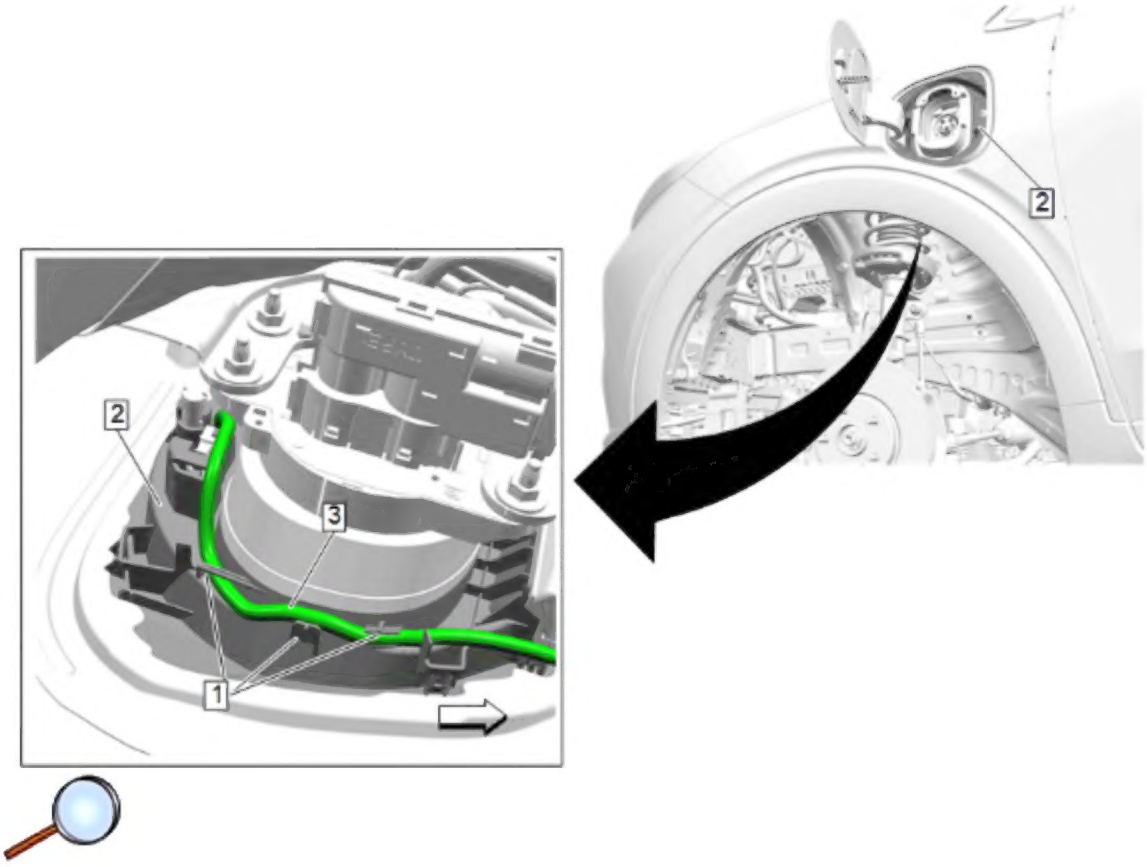
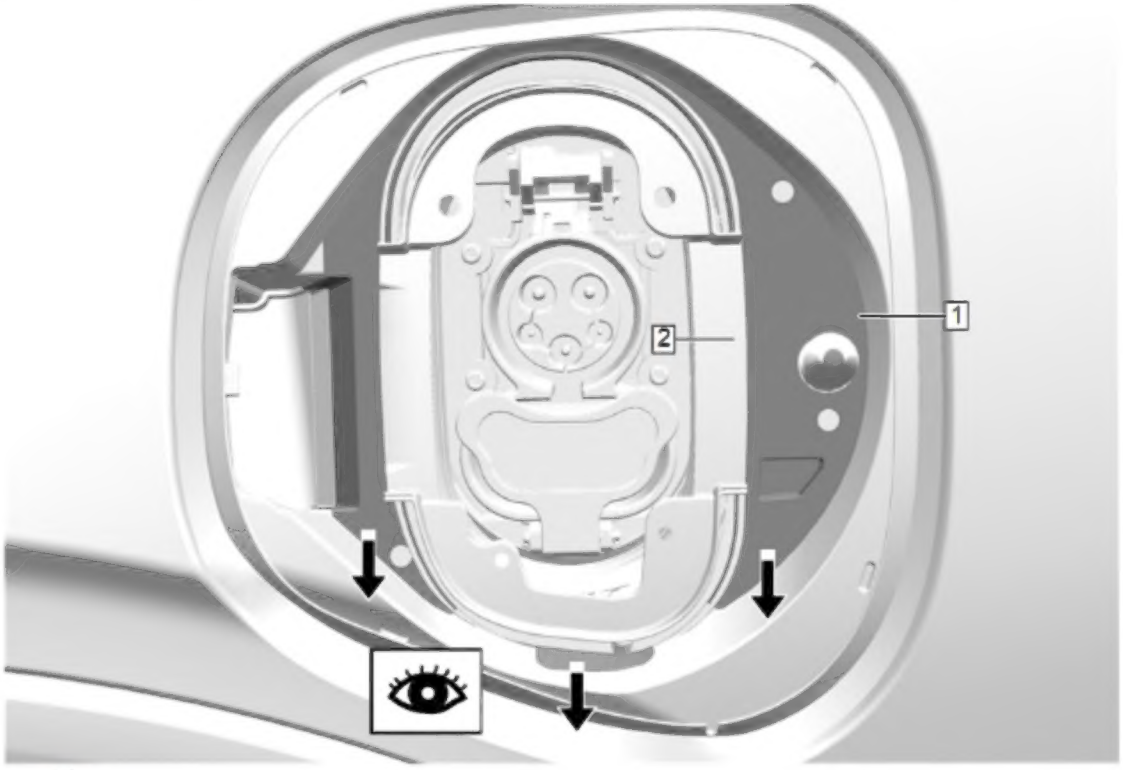


5. Remove the charge port door latch switch wire (3) from the tabs (1) on the rear of the production charge port housing (2) to avoid damaging the switch wire when drilling.

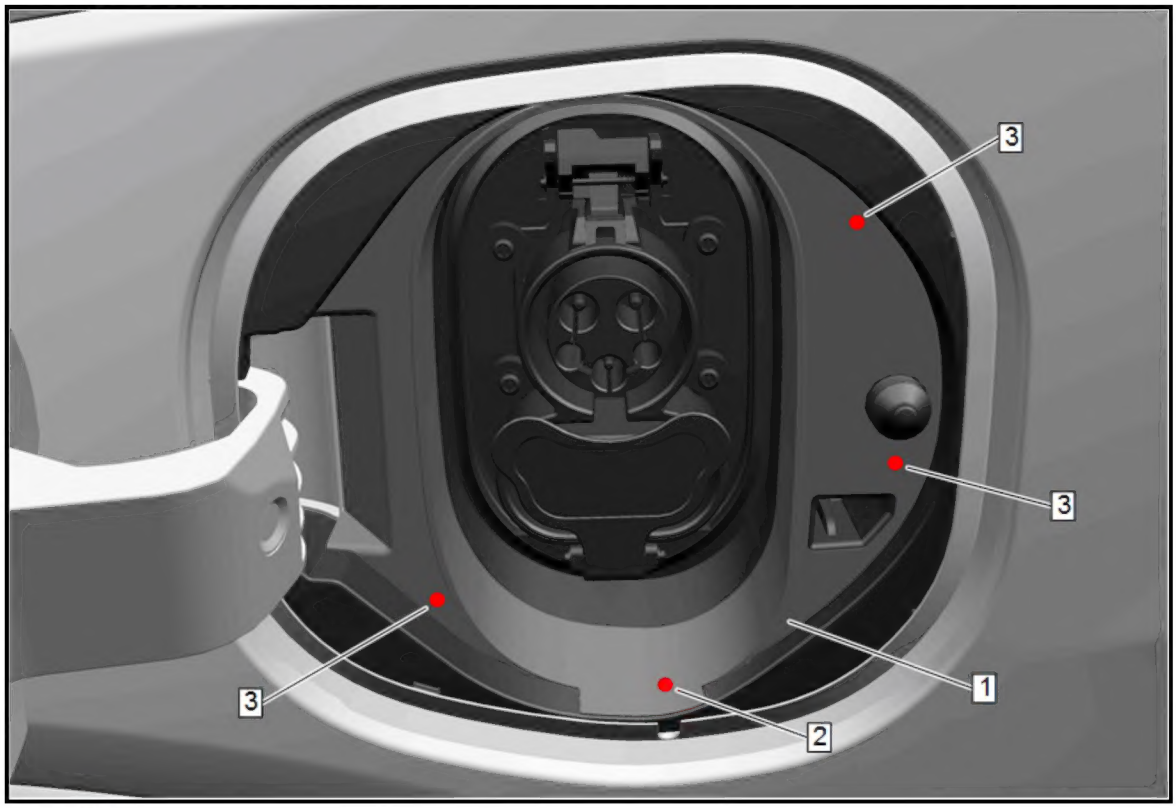


6. Position the provided template (1) to the production charge port housing (2).

6.1. Ensure template is fully seated in the lowest vertical position.

6.2. While holding template in place, use a scribe tool or punch to mark drill locations.

6.3. Remove the template.



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Caution: Always check scale, size and position of all templates before drilling. Failing to do so may cause damage to the vehicle, misalignment of components or the inability to install the accessory.

Note: Exterior temperature of the vehicle should be between 21°C – 43°C (70°F – 110°F) prior to drilling.

7. Drill 2 mm pilot holes at the locations (2), (3) noted on template.
8. Check and remove burrs from pilot holes, if necessary.
9. Continue to drill 5 mm holes at locations (3).
10. Continue to drill an 8 mm hole at location (2).

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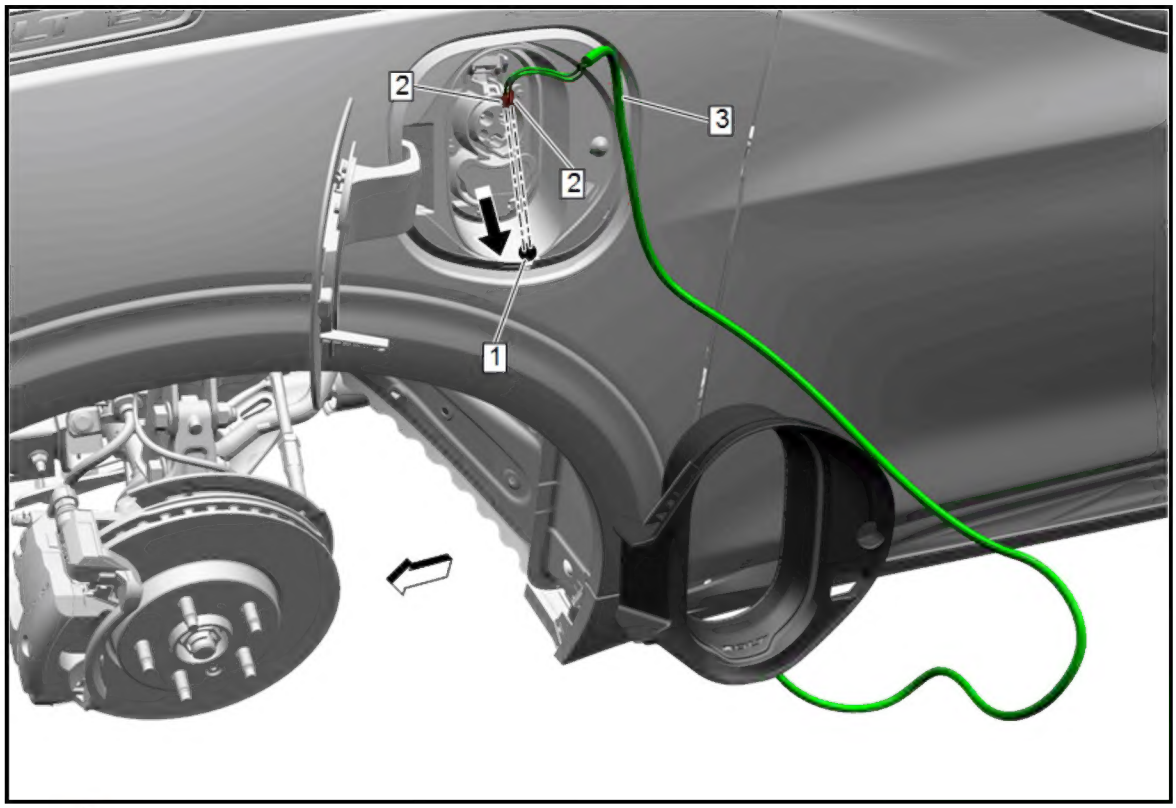
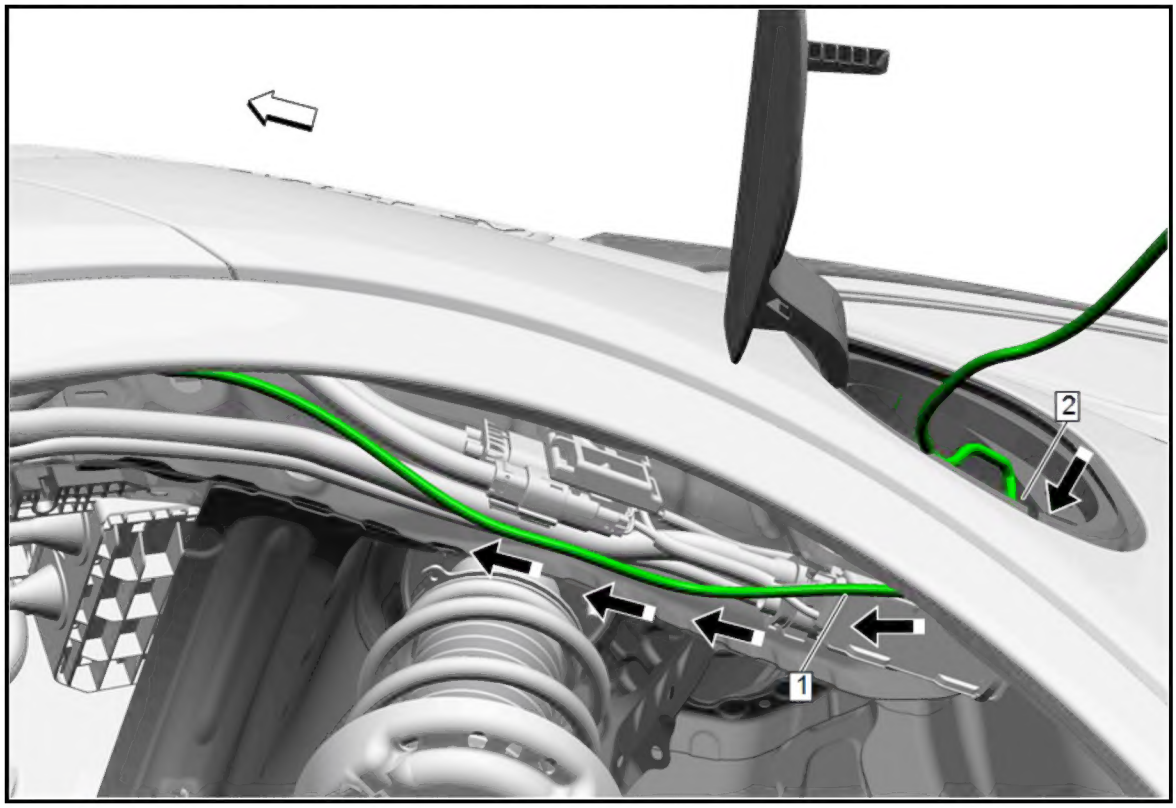
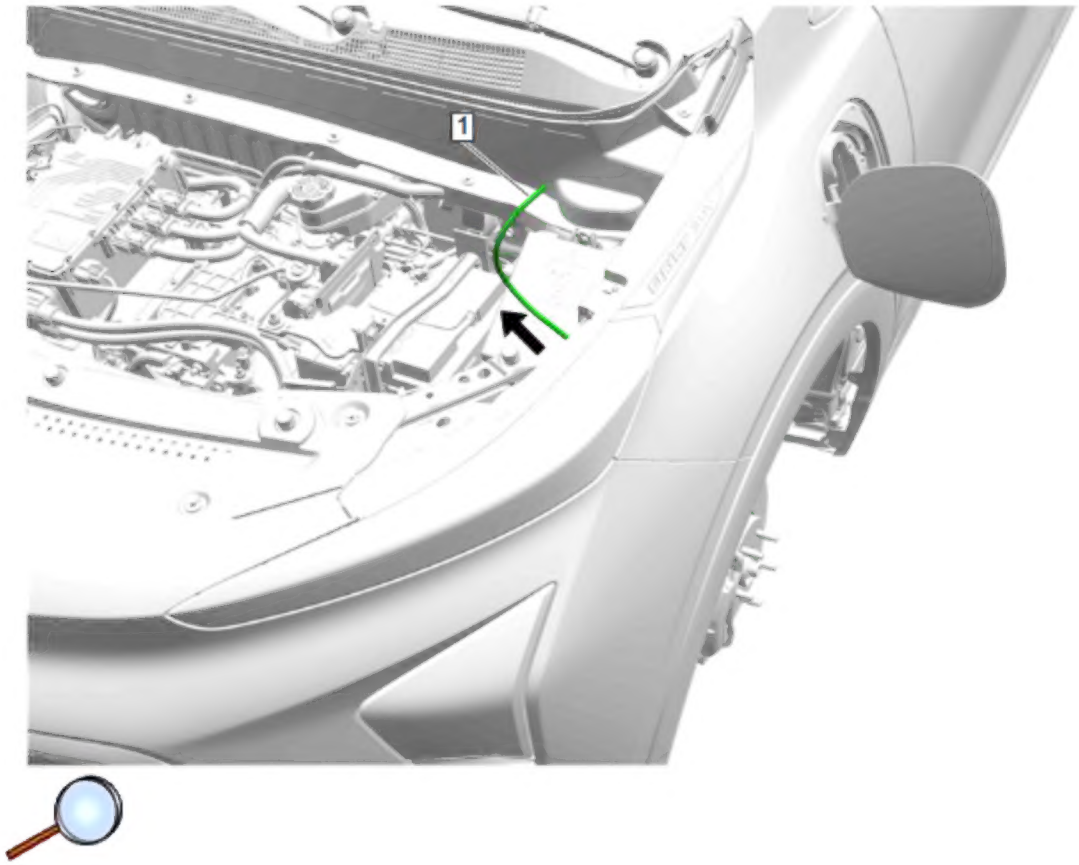


11. Stagger terminals (2) on bezel assembly pigtail (3) and route through 8 mm hole (1) one at a time, approximately 50.0 mm making sure not to damage terminals.



12. Through the wheel well access the wire harness (1) as it exits the 8 mm drilled hole (2), pull the harness (1) fully through the drilled hole.



13. Continue to pull the wire harness (1) until it is visible between fender panel outer and upper rail.
14. Assure bezel pigtail has been routed through the 8 mm drilled hole and there is no slack, but with no strain on the accessory housing at the wire exit point.

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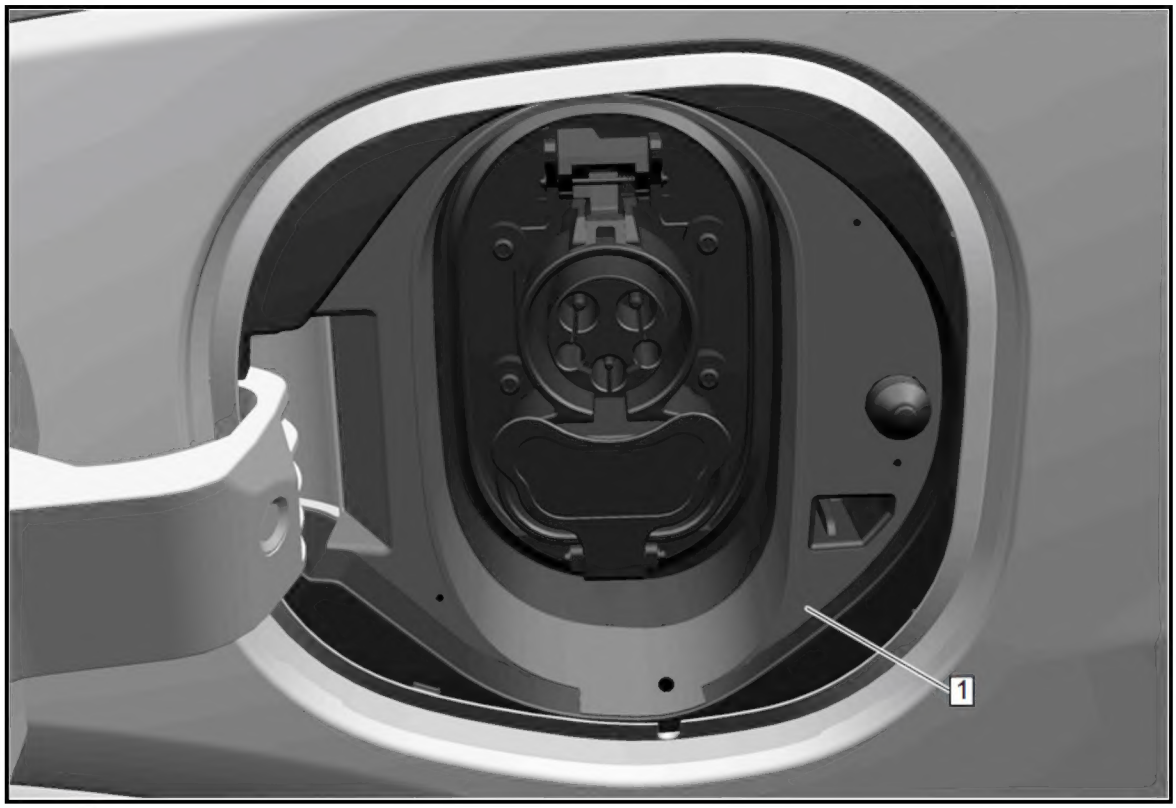

15. Using the provided solvent wipes, clean the production charge port housing surface (1).
16. Ensure that the production charge port housing rear shroud is seated behind the receptacle so that the shroud cannot interfere with the seating of the charge station coupler. Use the plastic wedge trim tool to adjust the shroud as needed.

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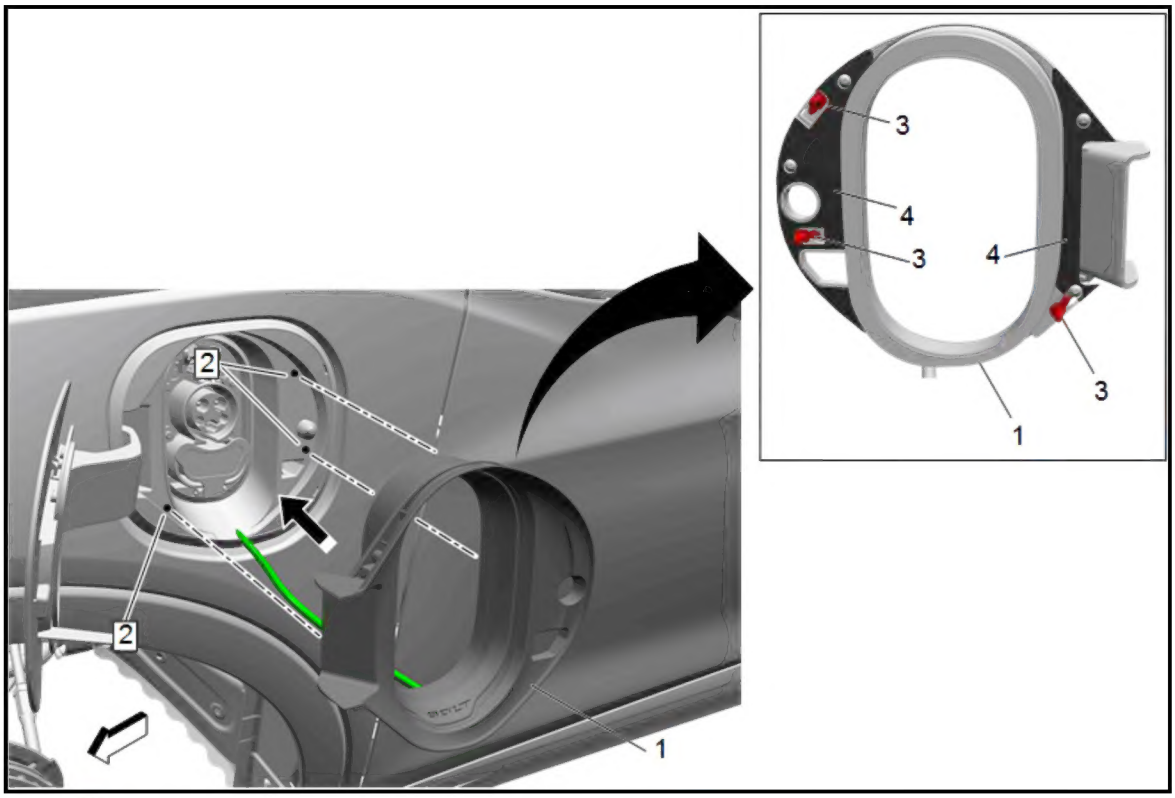

17. Remove the tape backing (4) from the back of the accessory charge port bezel (1).
18. Seat the accessory charge port bezel assembly (1) into charge port housing by aligning the three bezel posts (3) to housing 5 mm drilled holes (2).

    Note: Do not remove secured tape on back of housing.

    Note: Install the accessory charge port bezel carefully. Do not pinch wire when installing, tuck wires out of the way of snap posts before seating.

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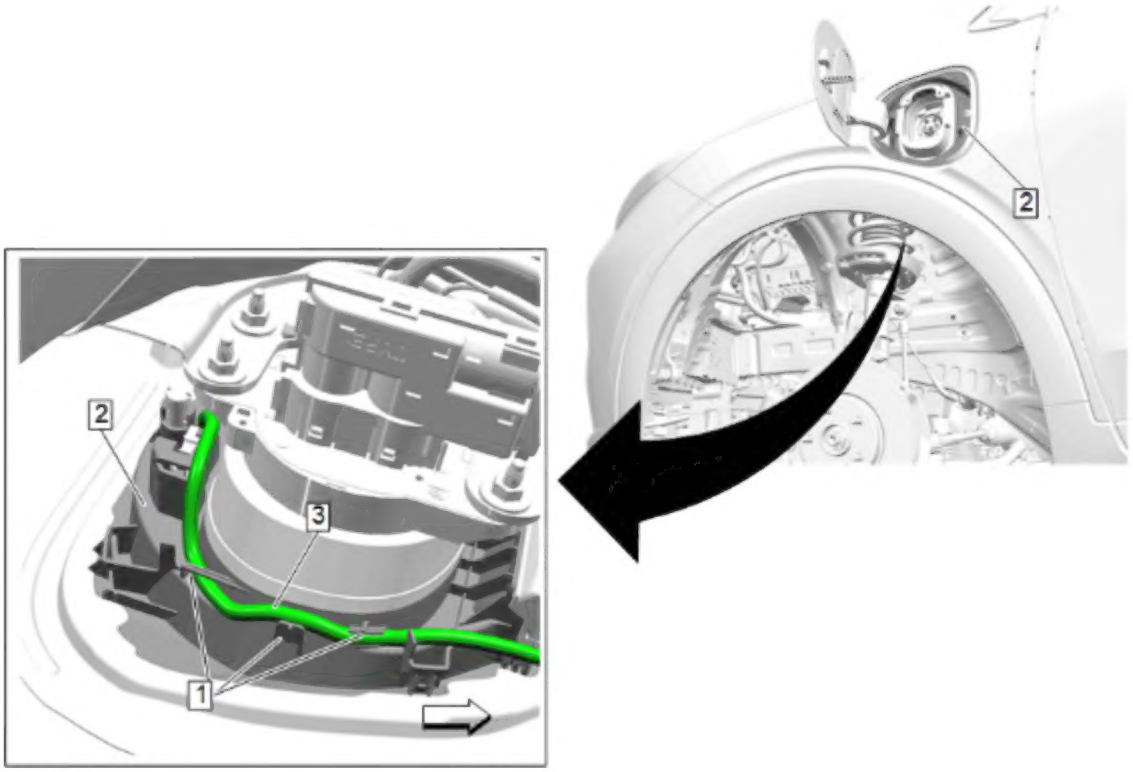
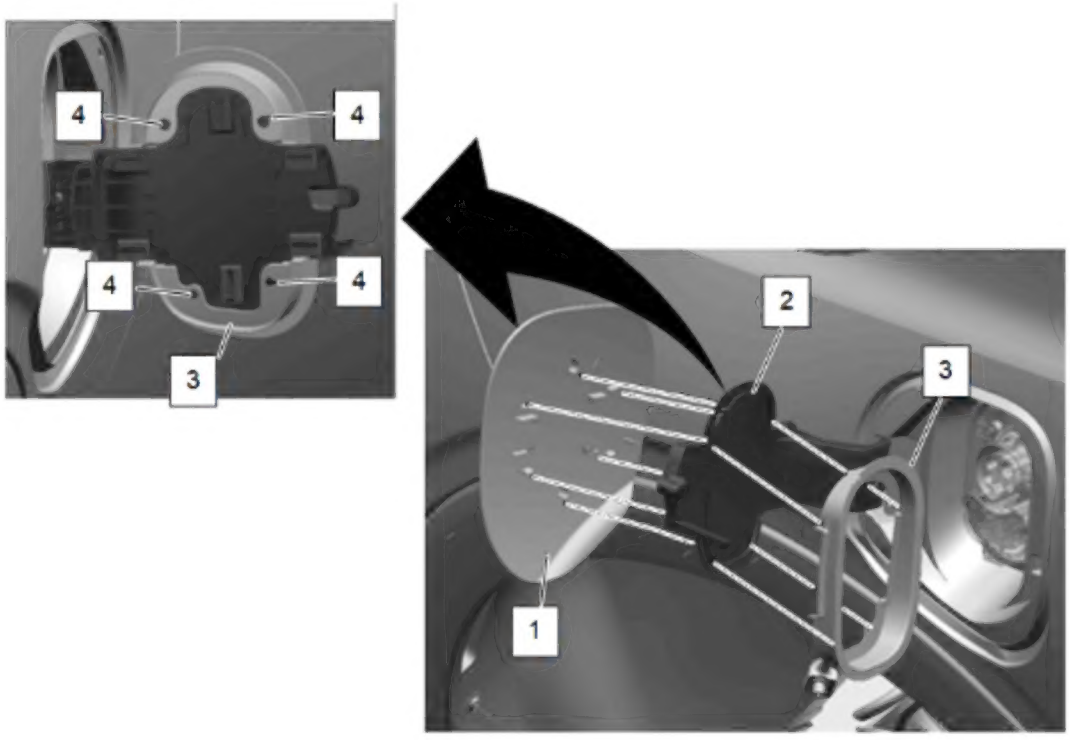


19. Secure the charge port door latch switch wire (3) to the tabs (1) on the rear of the production charge port housing (2).



20. Disengage the charge port door (1) from the hinge assembly (2) using the following method.

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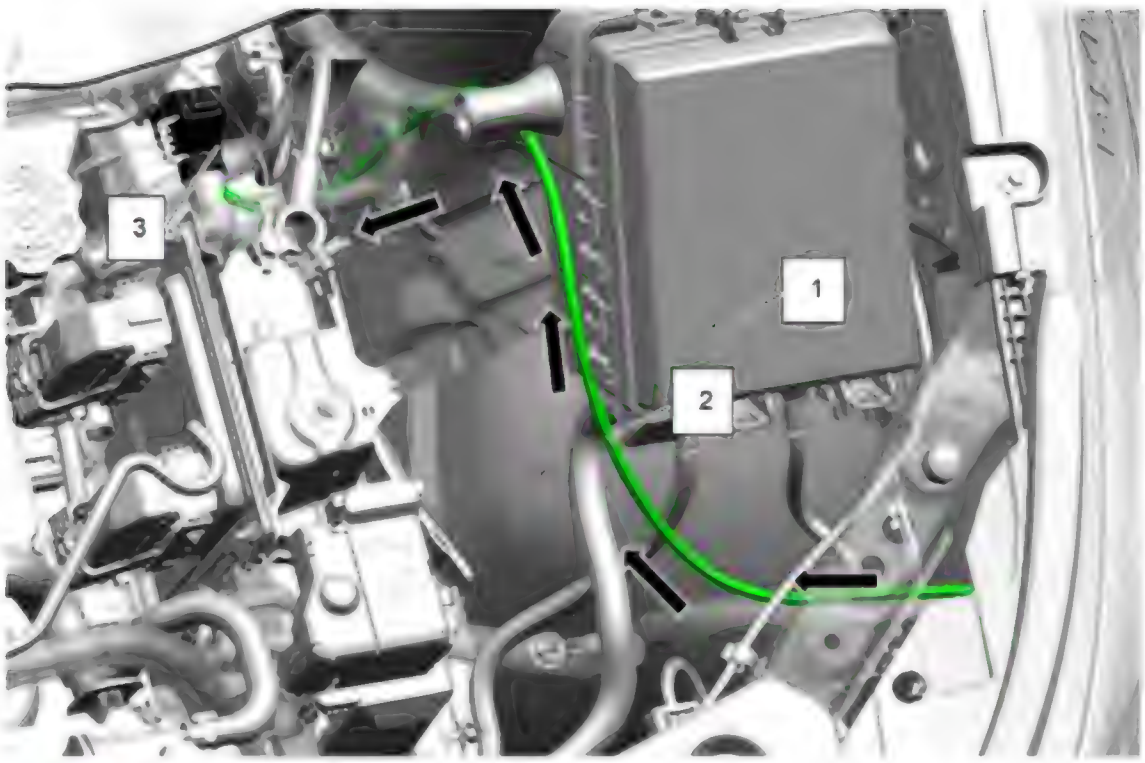
20.1. Use plastic wedge tool (1) to actuate release tabs and swing bottom of charge port door away from the hinge.

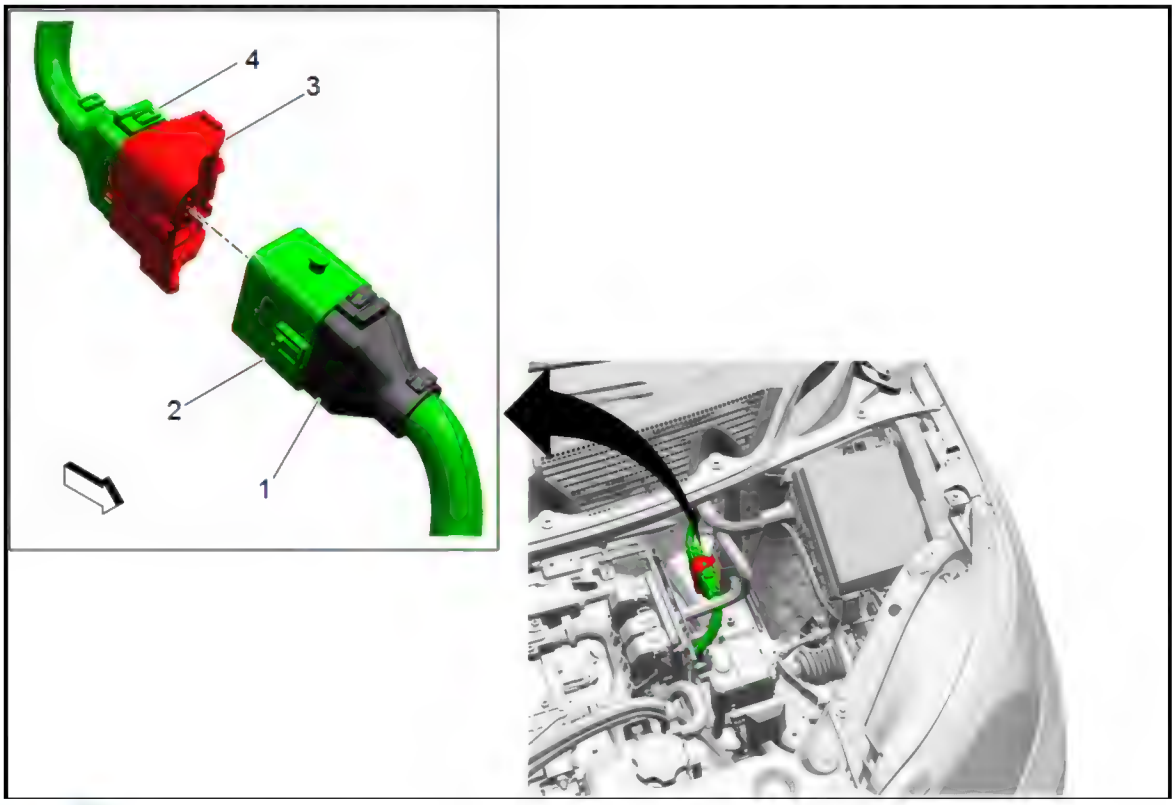
20.2. Move bottom of charge port door back and forth while applying upward pressure to release the charge port door from upper retainers.

Note: Make sure to install provided charge port seal provided in kit, due to production seal has too much compression on accessory charge port bezel.

21. Disengage the production charge port seal (3) from the retaining tabs (4) on the hinge and remove production seal (3) from hinge (2).
22. Position the provided charge port seal (3) in kit over the hinge (2) and engage the retaining tabs (4). Check that the replacement door seal is fully seated onto the retaining tabs.
23. Install the charge port door (1) to the hinge (2).
24. Check door open and close function for normal effort.
25. Close the charge port door.
26. Remove the 12 volt battery tray. Refer to Battery Tray Replacement in Vehicle Service Manual.
27. Reposition the ECM once battery tray is removed.



28. Continue to route bezel harness (2) behind left headlamp along side the UEC (1) towards the engine to body harness connection (3).



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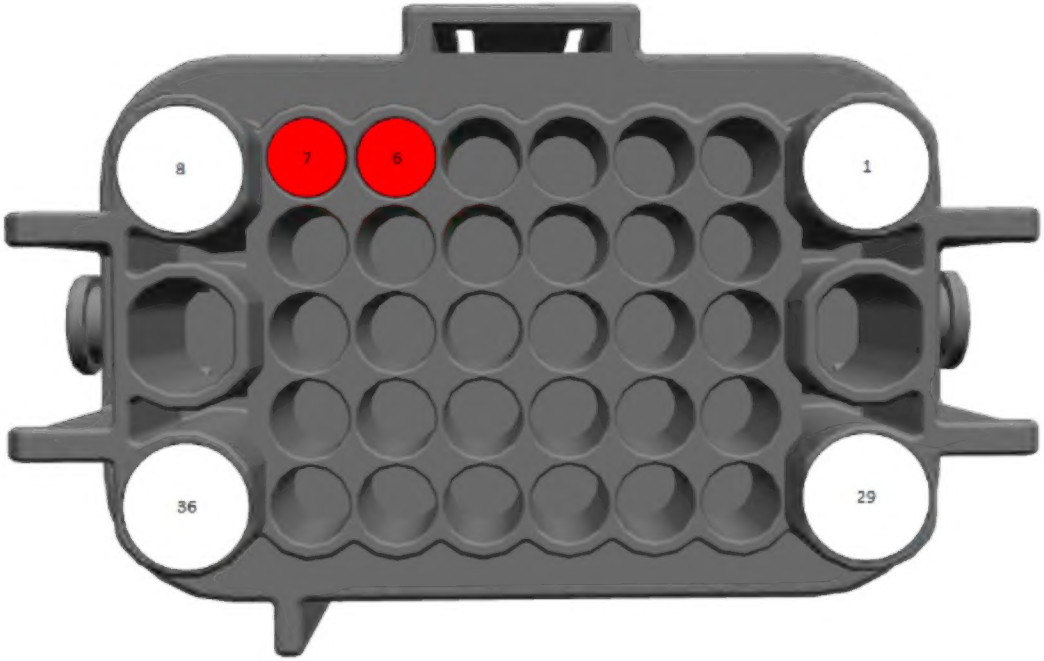
29. Locate the engine to body connection **X106** and disengage the connector lock (3) and disconnect the engine harness connector (2) to body harness connector (4).
30. Remove the connector cover (1) from the engine harness connector (2).



Note: Image shown is the back side of engine harness connector **X106**.

31. On the backside of engine harness connector **X106** insert the **BLACK** wire pigtail terminal of bezel into cavity 7.
32. On the backside of engine harness connector **X106** insert the **WHITE** wire pigtail terminal of bezel into cavity 6.

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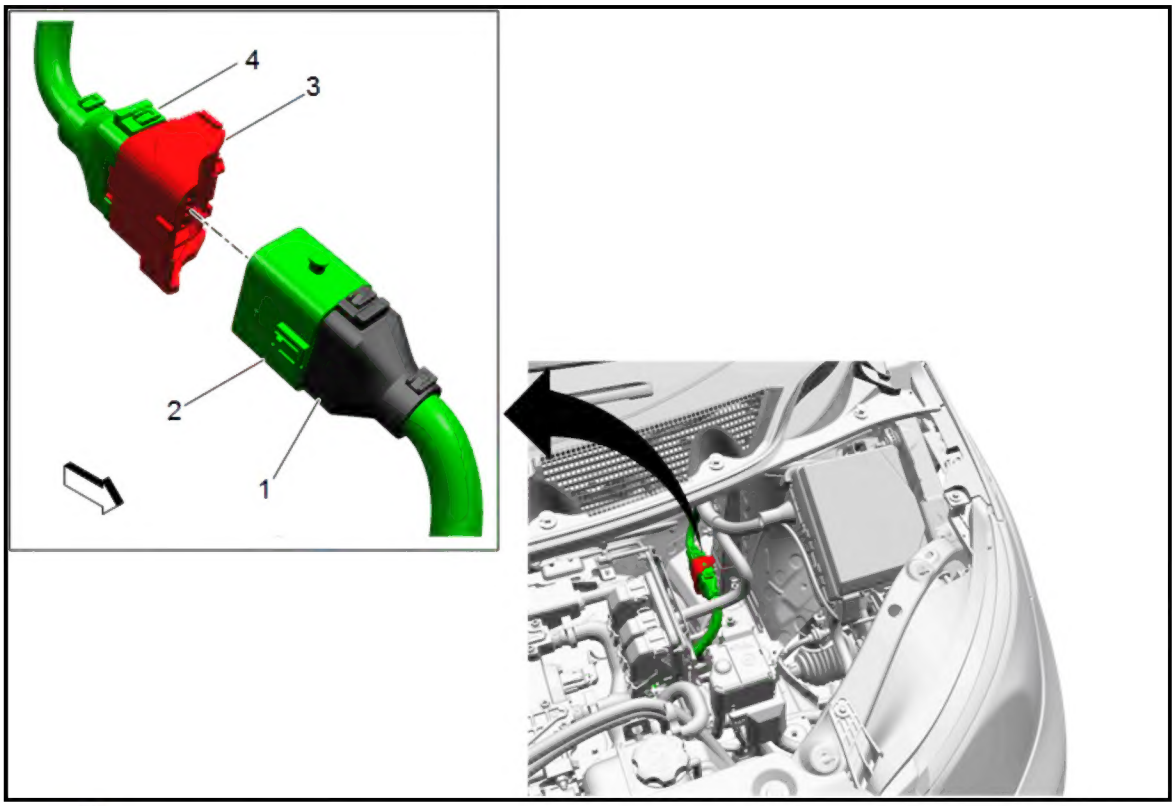
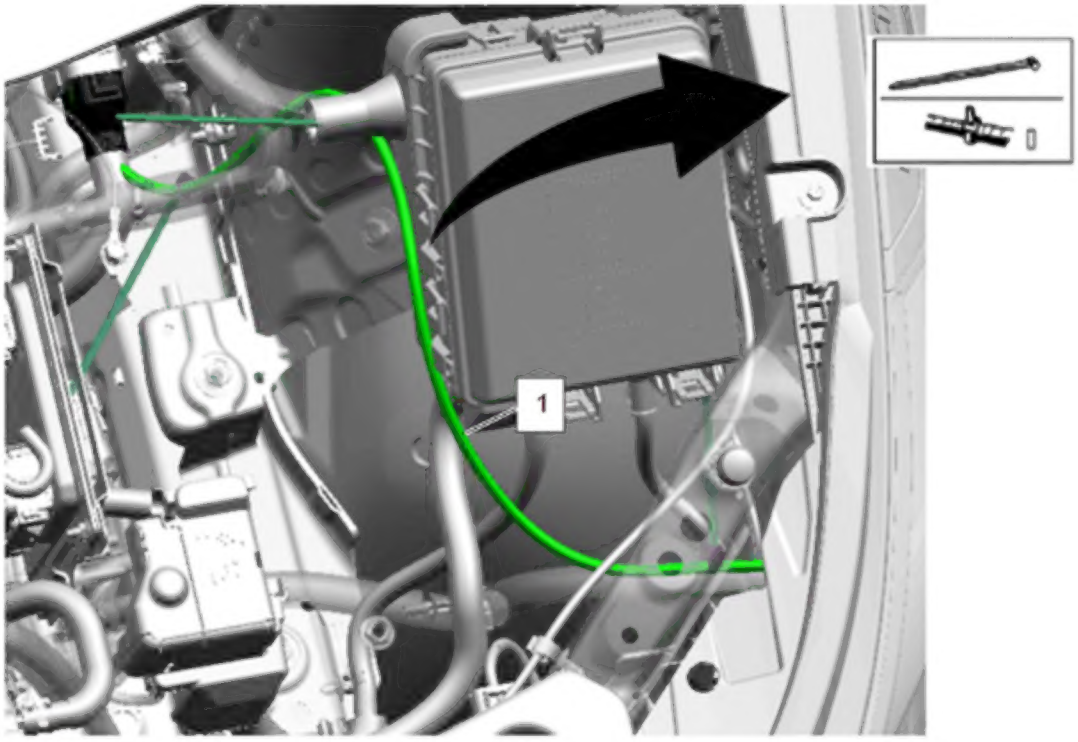


33. Install the connector cover (1) to the engine harness connector (2).
34. Connect the engine harness connector (2) to body harness connector (4) and engage the connector lock (3).



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35. Use the provided tie straps to secure the accessory pigtail (1) to the vehicle at approximately 150 mm increments.

    Note: Do not connect the 12 volt negative battery cable at this time.
36. Reinstall the 12 volt battery tray and 12 volt battery. Refer to Battery Tray Replacement in Vehicle Service Manual.
37. Test the system to ensure it is installed properly:

    37.1. Turn on the vehicle.

    37.2. With the vehicle "ON", open the charge port door. The illuminated bezel will turn on for 60 seconds.
38. The illuminated charge port will function as follows when a charge cord is attached:

    - The light stays on for 6 seconds while the system initializes and then will begin to flash to indicate charge status.
    - Initial – Light On
    - 0-25% – 1 Blink
    - 25-50% – 2 Blinks
    - 50-75% – 3 Blinks
    - 75-100% – 4 Blinks
    - 100% – Light Off after 60 seconds of unblinking illumination
    - When the charge cord is unplugged after a complete, or partial charge event, the light will turn on for 60 seconds.

      Note: The dashboard charge state lamp and the charge port light work identically as above EXCEPT for the full charge state, the dashboard lamp remains illuminated and unblinking even after the 60 second time out by door lamp.
39. Charge Port / Charge Station Coupler Test – Required to ensure that the vehicle charges properly after the accessory installation.

    39.1. Insert the charge station coupler into the vehicle charge port. Listen for a click indicating coupler is fully seated.

    39.2. Verify full insertion of the charge station coupler by pulling lightly on coupler. Ensure charge station coupler cannot be removed without disengaging the latch on the coupler.

    39.3. Check that the vehicle is charging and that the charge port light is indicating the state of charge as described above.

    39.4. Check accessory bezel to assure proper seating adjustment as necessary.

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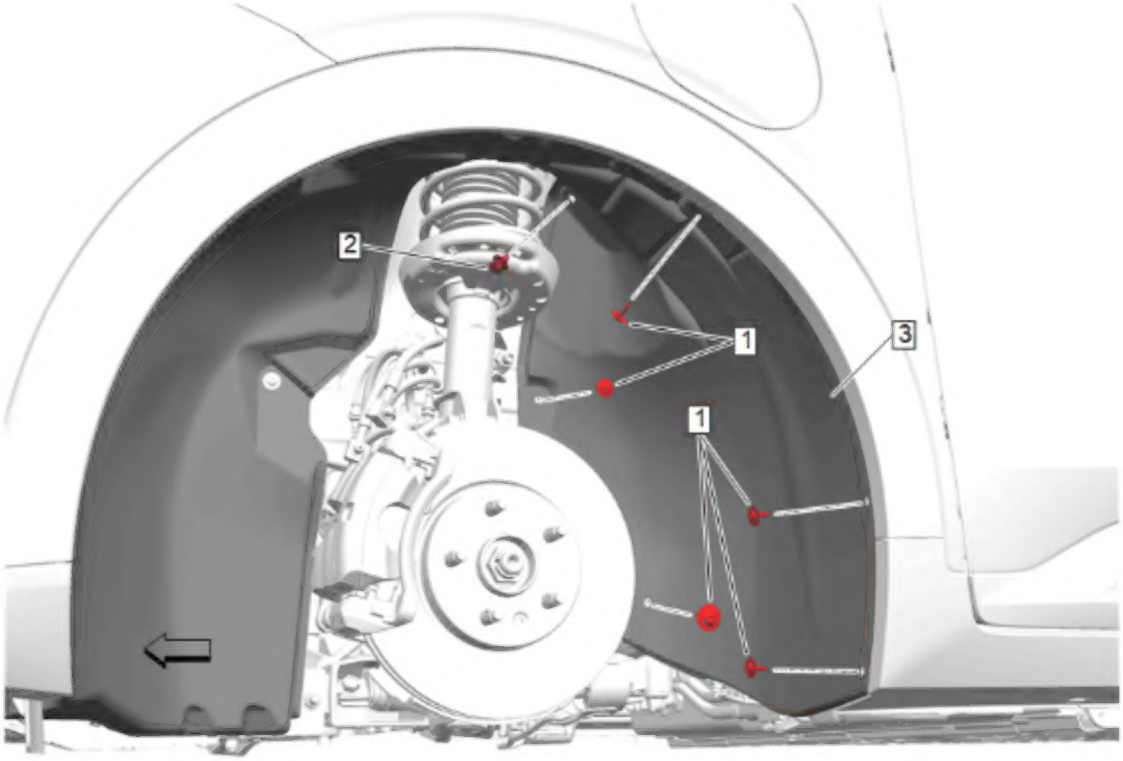

Caution: Use the correct fastener in the correct location. Replacement fasteners must be the correct part number for that application. Fasteners requiring replacement or fasteners requiring the use of thread locking compound or sealant are identified in the service procedure. Do not use paints, lubricants, or corrosion inhibitors on fasteners or fastener joint surfaces unless specified. These coatings affect fastener torque and joint clamping force and may damage the fastener. Use the correct tightening sequence and specifications when installing fasteners in order to avoid damage to parts and systems.

40. Reposition the wheel house liner (3) and install the screws (1) and retainer (2) holding the rear half of the left front wheel house liner.
    Tighten
    Tighten the wheel house liner screws to 2.5 N.m (22 lb in).
41. Install the left front wheel and tire assembly. Refer to Tire and Wheel Removal and Installation in Vehicle Service Manual.

    Note: During the installation process, diagnostic trouble codes (DTC) can be set when the vehicles battery is reconnected.
42. Clear any DTC's before finalizing the installation process.